ELSEVIER

Volume 524, Numbers 1–2, 1 November 1996

Journal of Organometallic Chemistry

Contents

Regular Papers

RPA AM1 calculations of NMR spin–spin coupling constants: geminal ^{119}Sn–^{119}Sn couplings
G.A. Aucar, E. Botek, S. Gómez (Corrientes, Argentina), E. Sproviero and R.H. Contreras (Buenos Aires, Argentina) 1

Molecular structure of α,α-carbonium [1.1]ferrocenylruthenocenophane + BF_4^- salt
M. Watanabe, I. Motoyama and T. Takayama (Yokohama, Japan) 9

Synthesis and characterization of ring-coupled cyclopentadienyl and indenyl bimetallic derivatives of Cr, Mo and W
R. Fierro, T.E. Bitterwolf (Moscow, ID, USA), A.L. Rheingold, G.P.A. Yap and L.M. Liable-Sands (Newark, DE, USA) 19

Variable temperature proton NMR study and reductively-induced isomerisation and degradation of $[CpCr(CO)_2(SPh)]_2$. Crystal structure of $Cp_2Co[CpCr(SPh)_3]$
L.Y. Goh, M.S. Tay (Kuala Lumpur, Malaysia), E. Sinn (Kingston upon Hull, UK) and R.G. Raptis (Iraklion, Greece) 31

Ein- und Mehrkernkomplexe des 9,10-Dihydro-9,10-dimethyl-9,10-diboraanthracens
P. Müller, H. Pritzkow und W. Siebert (Heidelberg, Germany) 41

Alkinol- und Alkindiol-funktionalisierte Zirconocen-Verbindungen: Synthese, Struktur und Reaktionsverhalten
H. Lang, S. Weinmann, M. Herres, M. Weinmann, O. Walter, B. Nuber und L. Zsolnai (Heidelberg, Germany) 49

Formation of vinyl and dithioformate metallacycles by insertion of an ester-functionalized alkyne or carbon disulfide into an Fe–H bond: crystal structure of *cis*-$[Fe(CH{=}CHCOOMe)(Ph_2PCH_2CH_2PPh_2)_2][BF_4]$
S.S.P. Almeida, M.T. Duarte, L.M.D. Ribeiro, F. Gormley, A.M. Galvão, J.J.R. Fraústo Da Silva and A.J.L. Pombeiro (Lisboa, Portugal) 63

Preparation, properties, and reactions of metal-containing heterocycles. XCIV. Manganese-induced synthesis and crystal structure of 3,5-di(adamant-1-yl)-1-thia-2,4-diphosphole
E. Lindner, E. Bosch, C. Maichle-Mößmer and U. Abram (Tübingen, Germany) 67

Regioselectivity in the nucleophilic functionalization of dibenzofuran, dibenzothiophene and xanthene complexes of $Mn(CO)_3^+$
I. Verona, J.P. Gutheil, R.D. Pike (Williamsburg, VA, USA) and G.B. Carpenter (Providence, RI, USA) 71

Chemistry of vinylidene complexes. XII. Transmetalation of the μ-vinylidene ligand in the reaction of $Cp(CO)_2MnPt(\mu\text{-}C{=}CHPh)(dppp)$ with $Fe_2(CO)_9$. Formation of new PtFe, $PtFe_2$ and $PtFe_3$ complexes
A.B. Antonova, A.A. Johansson, N.A. Deykhina, E.D. Korniyets, N.I. Pavlenko, G.V. Burmakina, A.I. Rubaylo (Krasnoyarsk, Russia), A.G. Ginzburg and P.V. Petrovskii (Moscow, Russia) 81

Organoiridium catalyzed hydrogen isotope exchange: ligand effects on catalyst activity and regioselectivity
A.Y.L. Shu, W. Chen and J.R. Heys (King of Prussia, PA, USA) 87

Novel chiral compounds of Group 13 metals: the X-ray crystal structures of $[((S)\text{-}2\text{-methylbutyl})_2MP^tBu_2]_2$ (M = Ga or In)
M.A. Malik, S.W. Haggata, M. Motevalli and P. O'Brien (London, UK) 95

Halogen exchange in substituted allyltin halides studied by 2D NMR EXSY as a tool to assess reactivity
E. Fouquet, T. Roulet (Talence, France), R. Willem (Brussels, Belgium) and I. Pianet (Talence, France) 103

Molecular and electronic structure of 1,2-disilacyclobutabenzenes. Ab initio molecular orbital and density functional study
M. Eckert-Maksić, Z. Glasovac (Zagreb, Croatia), M. Hodošček, A. Lesar (Ljubljana, Slovenia) and Z.B. Maksić (Zagreb, Croatia) 107

Carbonylation–decarbonylation reactions of the carbomethoxymethylcobalt complexes $CH_3O_2CCHRCo(CO)_3L$ (R = H, $CH_2CO_2CH_3$; L = CO, PPh_3) and their acyl derivatives
I. Kovács, G. Szalontai and F. Ungváry (Veszprém, Hungary) 115

Elsevier Science S.A.

Synthesis and ESR-characterization of radical anion complexes of lanthanum. X-ray crystal structure of the mixed bipy, $bipy^{-1}$ complex of lanthanum(III) $[LaI_2(bipy)(bipy)(DME)]$: evidence for an inter-ligand charge transfer
M.N. Bochkarev, I.L. Fedushkin, V.I. Nevodchikov, V.K. Cherkasov (Nizhny Novgorod, Russia), H. Schumann, H. Hemling and R. Weimann (Berlin, Germany) 125

Half-sandwich rhenium(III) acyl complexes: synthesis, structure and conversion to rhenium(I) and rhenium(III) isonitrile complexes
A.C. Filippou, B. Lungwitz, G. Kociok-Köhn and I. Hinz (Berlin, Germany) 133

Erzeugung, Nachweis und Stabilisierung isomerer Silaethene $R_2Si{=}C(SiR_3)_2$ mit jeweils sechs Me- und zwei Ph-Substituenten R
N. Wiberg, K.-S. Joo und K. Polborn (München, Germany) 147

Synthesis and crystal structure of the first metallabicycle cluster 2a-ruthenacyclopent[c,d]indenyl-triruthenium undecacarbonyl $Ru_4(CO)_{11}C_{15}H_{14}$
P. Escarpa Gaede (Berlin, Germany), S. Parsons (Edinburgh, UK) and B.F.G. Johnson (Cambridge, UK) 163

Organometallic-substituted allenes – determination of coupling signs and molecular structures of two stannylated allenes
B. Wrackmeyer, U. Dörfler, G. Kehr, H.E. Maisel and W. Milius (Bayreuth, Germany) 169

Enantiomeric haloruthenocenium salts: synthesis of the first representatives with the use of asymmetric reduction and asymmetric cyclopalladation
I.A. Mamedyarova (Baku, Azerbaijan), M.N. Nefedova and V.I. Sokolov (Moscow, Russia) 181

Novel bicyclic Si-ring systems
P. Gspaltl, S. Graschy, H. Siegl, E. Hengge and K. Gruber (Graz, Austria) 187

Electron transfer and chloride ligand dissociation in complexes $[(C_5Me_5)ClM(bpy)]^+/[(C_5Me_5)M(bpy)]^n$ (M = Co, Rh, Ir; $n = 2+, +, 0, -$): A combined electrochemical and spectroscopic investigation
W. Kaim, R. Reinhardt, E. Waldhör (Stuttgart, Germany) and J. Fiedler (Prague, Czech Republic) 195

Fluorosilyl(pyrrolyl)silylamines as precursors for intra- and intermolecularly stabilized iminosilanes
A. Frenzel, R. Herbst-Irmer, U. Klingebiel and S. Rudolph (Göttingen, Germany) 203

Hexanuclear and pentanuclear benzene carbido clusters: synthesis, characterisation and molecular structures of $[Os_6C(CO)_{14}(\eta^6\text{-}C_6H_6)]$, $[RuOs_5C(CO)_{14}(\eta^6\text{-}C_6H_6)]$ and $[RuOs_4C(CO)_{12}(\eta^6\text{-}C_6H_6)]$
J.W.-S. Hui and W.-T. Wong (Hong Kong, Hong Kong) 211

$[Ru_6(\mu_3\text{-}H)(\eta^2\text{-}\mu_4\text{-}CO)_2(\mu\text{-}CO)(CO)_{12}(\eta^5\text{-}C_5R_5)]$ (R = H or Me): syntheses, X-ray structures and spectroscopic characterization
E. Kolehmainen, K. Rissanen, K. Laihia (Jyväskylä, Finland), Z.A. Kerzina, M.I. Rybinskaya (Moscow, Russia) and M. Nieger (Bonn, Germany) 219

Reactions of $(CF_3)_2BNMe_2$ with Grignard and related reagents. Crystal and molecular structure of $(CF_3)(Mes)FB{-}FC{=}NMe_2$ and $Ph_3P{-}CH_2{-}(CF_3)_2B{-}NMe_2$
D.J. Brauer, H. Bürger, T. Dittmar, G. Pawelke and J. Rothe (Wuppertal, Germany) 225

Synthese und Kristallstrukturen von Cyclosilazanen mit ungewöhnlichen Konformationen
H.-J. Rakebrandt, U. Klingebiel, M. Noltemeyer (Göttingen, Germany), U. Wenzel und D. Mootz (Düsseldorf, Germany) 237

Mono- and bis(cyclopalladation) of the bis(ferrocenylimine) $[(\eta^5\text{-}C_5H_5)Fe\{(\eta^5\text{-}C_5H_4){-}CH{=}N{-}(C_6H_3\text{-}2\text{-}CH_3){-}\}]_2$
C. López and R. Bosque (Barcelona, Spain) 247

Syntheses and structures of cyclopentadienyl arsenic compounds. Part I: pentamethylcyclopentadienyl arsenic dihalides (Cp^*AsX_2, X = F, Cl, Br, I)
E.V. Avtomonov, K. Megges, S. Wocadlo and J. Lorberth (Marburg/Lahn, Germany) 253

Priority Communications

First synthesis and X-ray crystal structure of 1,2-(1,1'-ferrocenediyl)ethene
V.K. Aggarwal, D. Jones, M.L. Turner and H. Adams (Sheffield, UK) 263

Synthesis and coordination chemistry of the tethered bis(cyclopentadienyl)-phosphine ligand precursor $PPh(CH_2CH_2C_5H_5)_2$: X-ray structure of *trans*-$PdCl_2[PPh(CH_2CH_2\text{-}\eta^5\text{-}C_5H_4)_2Fe]_2$
O.J. Curnow (Christchurch, New Zealand), G. Huttner (Heidelberg, Germany), S.J. Smail and M.M. Turnbull (Christchurch, New Zealand) . . . 267

Preliminary Communications

Hybrid inorganic–organometallic compounds with gallium–gallium bonds
A.H. Cowley, A. Decken and C.A. Olazábal (Austin, TX, USA) 271

Organolanthanide catalyzed hydrogenation and hydrosilylation of substituted methylenecycloalkanes
G.A. Molander and J. Winterfeld (Boulder, CO, USA) 275

Synthesis, characterization, and molecular structure of $[(CH_3)_2C(C_5H_4)_2]Fe_2(\mu\text{-}CO)_2(CO)_2$
W. Van den Berg, J.A.M.T.C. Cromsigt, W.P. Bosman, J.M.M. Smits, R. De Gelder, A.W. Gal (Nijmegen, Netherlands) and J. Heck (Hamburg, Germany) 281

The molecular structure of tetrakis(trimethylstannyl)methane by gas electron diffraction
A. Haaland, V.I. Sokolov, H.V. Volden (Oslo, Norway), S. Kühner and J. Weidlein (Stuttgart, Germany) 285

Using metal–metal bond forming reactions as a synthetic strategy towards building polymers containing Fe–Fe and Fe–Sn–Fe bonds
P. McArdle, L. O'Neill, D. Cunningham (Galway, Ireland) and A.R. Manning (Dublin, Ireland) 289

Phospholyl compounds of nickel and uranium
T. Arliguie, M. Ephritikhine, M. Lance and M. Nierlich (Gif sur Yvette, France) 293

Book Review 299

Author Index 301

Subject Index 303

The publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. A leaflet describing our requirements is available from the publisher upon request.